

REMARKS/ARGUMENTS

Claims 1, 5, 7, and 11 are the independent claims. Claims 1-12 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

TELEPHONE INTERVIEW

Applicant thanks the examiner for the courtesy extended in the telephone interview dated August 7, 2007 and August 9, 2007. The substantive matter of the interviews is incorporated in this submission.

CLAIM REJECTION UNDER 35 U.S.C. § 103

Claims 1-4 and 7-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ahmed (U.S. Patent No. 6,782,261) in view of Hideki (JP 2001-128210); claims 5 and 11 stand rejected under the same over Ahmed in view of Zhao (U.S. Patent No. 7,006,473); Claims 6 and 12 stand rejected under the same over Ahmed in view of Stanislaw (JP 2000-201369). Applicant respectfully traverses herein the rejection with respect to the claim as amended.

INDEPENDENT CLAIMS 1 AND 7

Independent claim 1 recites the following:

A wireless communication terminal comprising:
a measurement section that measures quality of a signal transmitted from a base station;
a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff; and
a handoff section that performs the handoff based on a determination result of the determination section,

wherein the determination section changes the criterion of the determination of the handoff when the handoff section performs the handoff in a predetermined repetition pattern.

The applied references do not disclose or suggest, “[T]he determination section changes the criterion of the determination of the handoff when the handoff section performs the handoff in a predetermined repetition pattern,” as recited in independent claim 1.

The Office Action notes that Ahmed does not disclose or suggest that feature (*Office Action at page 4, last paragraph recites, “Ahmed fails to disclose a chance in the criterion of a handoff determination when the handoff process is performed in predetermined repetition pattern...”*). Accordingly, the Office Action cites Hideki to remedy the deficiencies of Ahmed.

However, Hideki also fails to disclose the features of the claimed invention. In particular, Hideki does not disclose or suggest changing handoff criteria based on the **predetermined repetition pattern**, as recited in independent claim 1. On the contrary, Hideki teaches a mobile system detecting the **frequency of handovers**. When the frequency reaches a threshold, the mobile system reduces the frequency of handover (*see Hideki: (57) abstract, SOLUTION*).

The Office Action asserts that Hideki teaches the “predetermined repetition pattern” feature (*Office Action at page 2, 1st Para, last 3 lines*), and, in particular, cites Hideki Abstract and Para. 4-15 and 23 as disclosing that feature. However, the cited portion of Hideki merely discloses the frequency of handover, and not the “predetermined repetition pattern” feature recited in the claims. The Office Action seems to be advancing that frequency of handovers as disclosed by Hideki is equivalent to the “predetermined repetition pattern.” Applicant respectfully disagrees with this assertion for reasons discussed herein.

First, frequency refers to the number of handoffs in a fixed period of time. Detecting frequency does not require, for example, **the identification of base stations** involved in the handoff.

The Specification at page 11, line 19 – page 13, line 5 discloses an example of the predetermined repetition pattern. Here, the predetermined repetition pattern is base station A (the n-5 base station) to base station B (the n-4 base station), then B to A (the n-3 base station), then A to B (the n-2 base station), then B to A (the n-1 base station), then A to B (the n base station) again. In this embodiment, the predetermined repetition pattern is the n-5, n-3, and n-1 base stations are the same (A), and the n, n-2, and n-4 base stations are the same (B). In this example, the method requires the system to discern and record the identification of the base stations in previous exchanges.

In contrast, Hideki simply records how many times the exchange had taken place within a fixed period of time; the identification of the base stations in the exchange is of no importance. In view of the foregoing, frequency of handovers as disclosed by Hideki cannot be equivalent to the “predetermined repetition pattern.”

The ancillary Stanislaw reference is applied in the rejection of claim 6, which depends from independent claim 1. Stanislaw is directed at correcting the standard message structure for a forward link, and a smooth shifting of service when the mobile station moves from one service area, such as 2G, to another service area, such as 3G (*Stanislaw Abstract*). Stanislaw does not remedy the deficiencies of Ahmed and Hideki.

Since Ahmed, Hideki, and Stanislaw do not disclose all the features of independent claim 1, that claim is allowable over the applied references.

Independent claim 7 recites similar features as claim 1 and is therefore also allowable over Ahmed and Hideki. The allowance of claims 1 and 7 is respectfully requested.

Claims 2-4, 6, 8-10, and 12 depend from claims 1 or 7 are also allowable for at least the same reasons as their respective parent claims.

INDEPENDENT CLAIMS 5 AND 11

Regarding amended independent claim 5, it recites the following:

A wireless communication terminal comprising:
a measurement section that measures quality of a signal transmitted from a base station;
a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff; and
a handoff section that performs the handoff based on a determination result of the determination section,
wherein the determination section determines whether or not the handoff is to be performed based on a value obtained by time-averaging the measurement result of the measurement section immediately after a prior handoff is performed, and determines whether or not the handoff is to be performed based on a value obtained by number-averaging the measurement result of the measurement section after a lapse of a predetermined period since the prior handoff is performed.

The Office Action takes notice that Ahmed does not disclose or suggest, “wherein the determination section determines whether or not the handoff is to be performed based on a value obtained by time-averaging the measurement result of the measurement section immediately after a prior handoff is performed,” and “determines whether or not the handoff is to be performed based on a value obtained by number-averaging the measurement result of the measurement section after a lapse of a predetermined period since the prior handoff is performed,” recited in claim 5.

The Office Action asserts Zhao teaches the features of claim 5. Applicant disagrees with the assertion. Office Action at page 12, lines 16-19 asserts that Zhao

teach the handoff process being started based on number of measurement of pilot signal strength over time. However, that disclosure does not constitute “time averaging” or “number averaging.” Zhao does not expressly teach averaging the measurements as asserted in the Office Action. In particular, Zhao does not use the words “average” at all in its entire disclosure and claims. (*Applicant notes, if “average” is not used, then some divisions must be disclosed. Zhao describes Code Division Multiple Access, but that relates to signal encoding and not averaging the measurements*). Applicant fails to see how Zhao can disclose or suggest the features “time averaging” and “number averaging” without using the words “average”.

Accordingly, Applicant respectfully requests the Examiner point out the specific language in Zhao that the Examiner relied on for the assertion.

Clearly, Zhao is directed to a CDMA handover method without using average. According to Zhao, pilot signal strength is measured continuously and compared to a T-DROP value and a T-ADD value. A mobile station is initially using base station A. When base station B’s pilot signal strength goes above T-DROP value, the station enters the candidate list. When base station B’s pilot signal strength goes above T-ADD, the mobile station initiates the handover process to base station B (*see Zhao: FIG. 2, Reference No. 7; col. 5, lines 5-8*). When the base station A’s pilot signal strength goes below T-DROP, the mobile station initiates the termination process (*see Zhao: FIG. 2, Reference No. 10; col. 5, lines 13-15*).

Moreover, Applicant respectfully notes that “**time average**” specifies a particular averaging method. Even if Zhao does teach a method using generic averaging method, Zhao still cannot be said to teach the “time average” feature.

In contrast, independent claim 5 recites that the handoff decision is based on two measurements. The first is the measurements of the signal quality “immediately after a prior handoff is performed.” The second is the measurements of the signal quality at “a predetermined period” after the prior handoff. Applicant

respectfully submits that even if Zhao does disclose averaging the measurement, Zhao is still not seen to disclose or suggest those features. Zhao relies on the current measurement of signal quality, and comparing the current measurement with the preset values of T-ADD and T-DROP in determining handoffs. The T-ADD and TDROP are values provided by a network layer (*Zhao at col. 8, lines 26-29*). Zhao does not disclose or suggest storing measurements of signal quality immediately after a prior handoff is performed, and at a predetermined period after the prior handoff.

Accordingly, Ahmed and Zhao do not disclose all the features of independent claim 5, and that claim is allowable over Ahmed and Zhao.

Independent claim 11 recites similar features as claim 5 and is therefore also allowable over Ahmed and Zhao. The allowance of claims 5 and 11 is respectfully requested.

The ancillary Stanislaw reference is applied in the rejection of claim 12, which depends from independent claim 11. Stanislaw is directed at correcting the standard message structure for a forward link, and a smooth shifting of service when the mobile station moves from one service area, such as 2G, to another service area, such as 3G (*Stanislaw Abstract*). Stanislaw does not remedy the deficiencies of Ahmed and Zhao.

Claims 6 and 12 depend from independent claims 7 or 11 are thus also allowable for at least the same reasons as their respective parent claims. Allowance of those claims is respectfully requested.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

Appl. No. 10/542,225
Amdt. Dated August 30, 2007
Reply to Office Action of April 30, 2007

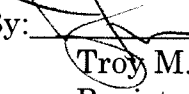
Attorney Docket No. 81887.0128
Customer No. 26021

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: August 30, 2007

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